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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,759	07/06/2004	Dominicus Martinus Wilhelmus Leenaerts	NL 020002	7176

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

NGUYEN, TUAN HOANG

ART UNIT PAPER NUMBER

2618

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/500,759

Applicant(s)

LEENAERTS ET AL.

Examiner

Tuan H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response To Arguments

1. Applicant's arguments, see applicant's remarks, filed on 04/13/2006, with respect to the rejection(s) of claims 1-16 under 35 U.S.C § 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Doetsch et al. (US PAT. 6,847,812 hereinafter, "Doetsch") and further in view Sasaki et al. (US PAT. 4,606,048 hereinafter, "Sasaki").

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 6-7, 9 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doetsch et al. (US PAT. 6,847,812 hereinafter, "Doetsch") in view Sasaki et al. (US PAT. 5,423,076 hereinafter, "Sasaki").

Consider claim 1, Doetsch teaches a method for providing clock signals (item 10) to a mixed signal (items 20 and 23) telecommunication chip (items 1 and 11) having a communication signal in a communication signal band (col. 3 lines 27-55), clock signals comprising a central clock frequency signal (system clock) and sub-frequency signals (sampling frequency) which are multiples or divisions (item 22) of central clock frequency signal (Fig. 1 col. 3 line 27 through col. 6 line 41).

Doetsch does not explicitly show that the central clock frequency signal is selected such that the central clock frequency signal and the sub-frequency signals are located outside the telecommunication signal band.

In the same field of endeavor, Sasaki teaches the central clock frequency signal is selected such that the central clock frequency signal and the sub-frequency signals are located outside the telecommunication signal band (fig. 1 col. 3 lines 7-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, the central clock frequency signal is selected such that the central clock frequency signal and the sub-frequency signals are located outside the telecommunication signal band, as taught by Sasaki, in order to provide a radio communication system operated under a quadrature amplitude modulation method of 32 level or higher.

Consider claims 3 and 9, Doetsch further teaches the central clock frequency is a multiple of 2 (col. 4 lines 31-38, "multiple of 2" read on "selecting suitable values").

Consider claim 6, Doetsch further teaches the chip comprising functional circuit blocks, wherein the central-clock-frequency is supplied to the functional blocks by an on-chip oscillator (col. 4 lines 31-41).

Consider claim 7, Doetsch teaches mixed signal telecommunication chip comprising as functional blocks a RF front end unit (item 11), an analog to digital converter (item 6), a digital to analog converter (item 7), a modulator (item 5) /demodulator (item 3), a RF synthesizer (item 22) and an oscillator (item 8) for processing a communication signal in a communication signal band (col. 3 lines 25-55), wherein the functional blocks are fed by clock signals (item 10) comprising a central clock frequency signal (system clock) and sub-frequency (sampling frequency) signals which are multiples or divisions (item 22) of central clock frequency signal (col. 3 lines 48-52) (Fig. 1 col. 3 line 27 through col. 6 line 41).

Doetsch does not explicitly show that the central clock frequency signal and the sub-frequency signals are located outside of the telecommunication signal band.

In the same field of endeavor, Sasaki teaches the central clock frequency signal and the sub-frequency signals are located outside of the telecommunication signal band (fig. 1 col. 3 lines 7-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, the central clock frequency signal and the sub-frequency signals are located outside of the telecommunication signal band, as taught

by Sasaki, in order to provide a radio communication system operated under a quadrature amplitude modulation method of 32 level or higher.

Consider claim 12, Doetsch further teaches the D/A converter (item 7) is directly connected to the RF front end (item 11) portion (Fig. 1 col. 3 lines 27-55).

Consider claim 13, Doetsch further teaches an on-chip-oscillator supplying the central clock frequency to the functional blocks (Fig. 1 col. 3 lines 48-52).

Consider claim 14, Doetsch further teaches the on-chip oscillator is connected to an external oscillator (Fig. 1 col. 2 lines 32-49).

Consider claim 15, Doetsch further teaches the external oscillator is a crystall oscillator (Fig. 1 col. 6 lines 1-4).

4. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doetsch et al. (US PAT. 6,847,812 hereinafter, "Doetsch") in view Sasaki et al. (US PAT. 5,423,076 hereinafter, "Sasaki") as applied to claims above, and further in view of Kawamura (U.S PUB. 2003/0003867).

Regarding claims 2 and 8, Doetsch and Sasaki, in combination, fails to teaches the telecommunication signal band is between 2,402 GHz and 2,480 GHz. However,

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Kawamura teaches the telecommunication signal band is between 2,402 GHz and 2,480 GHz (page 6 [102]). Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Kawamura into view of Doetsch and Sasaki, in order to conduct good remote control of the other device or the like using various types of communication networks.

5. Claims 4-5, 10-11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doetsch et al. (US PAT. 6,847,812 hereinafter, "Doetsch") in view Sasaki et al. (US PAT. 5,423,076 hereinafter, "Sasaki") as applied to claims above, and further in view of Genrich (US PAT. 6,647,075).

Regarding claims 4 and 10, Doetsch and Sasaki in combination, fails to teaches the central clock frequency is in between 70 MHz and 90 MHz, or is 64 MHz. However, Genrich teaches the central clock frequency is in between 70 MHz and 90 MHz, or is 64 MHz (col. 5 lines 16-27). Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Genrich into view of Doetsch and Sasaki, in order to provide a based tuner with an input clock rate enabling a wide tuning bandwidth to reduce or minimize clock harmonic interference.

Consider claims 5 and 11, Genrich further teaches the central clock frequency is 64 MHz, the precision is 8 bit and the over-sampling factor is 32 (col. 5 lines 16-27).

Consider claim 16, Genrich further teaches the central clock frequency is 76 MHz, 78 MHz or 80 MHz (col. 5 lines 16-27).

Conclusion

6. Any response to this action should be mailed to:

Mail Stop _____ (Explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22313

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571) 272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay A. can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information Consider the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Nguyen
Examiner
Art Unit 2618


NAY MAUNG
SUPERVISORY PATENT EXAMINER